

Applicants : Peter D. Kwong et al  
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**REMARKS**

Claims 1, 21, 27, 28, 33, 34, 36-38, 42, 44-49, 53, 55-59, 61, 80, 81, 83-86, 90, 91 and 94 are pending in the subject application. No claim has been added, cancelled or amended herein. Accordingly, claims 1, 21, 27, 28, 33, 34, 36-38, 42, 44-49, 53, 55-59, 61, 80, 81, 83-86, 90, 91 and 94 are still pending.

**Restriction Requirement**

In the September 20, 2005 Office Action, the Examiner restricted pending claims 1, 21, 27, 28, 33, 34, 36-38, 42, 44-49, 53, 55-59, 61, 80, 81, 83-86, 90, 91 and 94 to one of the following allegedly distinct inventions under 35 U.S.C. §121 as follows:

- I. Claims 1 and 21, drawn to the special technical feature of a crystal and a method for producing a crystal;
- II. Claims 27, 28, 37 and 38, drawn to the special technical feature of a method for identifying or designing a compound capable of binding to a portion of HIV-gp120, including a compound that binds to the CD4 binding site on HIV-gp120;
- III. Claims 33, 34, 42, 44-46, 61, 80, 81 and 83, drawn to the special technical feature of a compound or a composition or pharmaceutical composition thereof that

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binds to a portion of HIV-gp120, including a compound that binds to the CD4 binding site on HIV-gp120;

- IV. Claim 36, drawn to the special technical feature of a method of inhibiting the interaction of HIV-gp120 with CD4;
- V. Claims 47, 84 and 85, drawn to the special technical feature of a method of inhibiting HIV infection in a subject by administering a composition comprising a compounds that binds to the CD4 binding site on HIV-gp120;
- VI. Claims 27, 28, 48 and 49, drawn to the special technical feature of a method for identifying or designing a compound capable of binding to a portion of HIV-gp120, including a compounds that binds to the chemokine receptor binding site on HIV-gp120;
- VII. Claims 33, 34, 53 and 55-57, drawn to the special technical feature of a compound or a composition or pharmaceutical composition thereof that binds to a portion of HIV-gp120, including a compound that binds to the chemokine receptor binding site on HIV-gp120;
- VIII. Claim 58, drawn to the special technical feature of a method of inhibiting HIV infection in a subject by administering a composition comprising a compound

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that binds to the chemokine receptor binding site on HIV-gp120;

- IX. Claim 59, drawn to the special technical feature of a method of inhibiting the interaction of HIV-gp120 with a chemokine receptor;
- X. Claims 86 and 90, drawn to the special technical feature of a variant of gp120 and a vaccine comprising said variant;
- XI. Claim 91, drawn to the special technical feature of a method for inducing an antibody against HIV using a variant of gp120; and
- XII. Claim 94, drawn to the special technical feature of an antibody against a variant of gp120.

In response to this restriction requirement, applicants hereby elect, with traverse, to prosecute at this time the invention of Examiner's Group II, claims 27, 28, 37 and 38.

However, applicants respectfully request that the Examiner reconsider and withdraw the restriction requirement, in particular with regard to the claims of Group VI.

Under 37 C.F.R. §1.499, an examiner of a national stage application may require restriction of claims in the national

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stage application which do not have unity of invention. Under M.P.E.P. §1893.03, claims have "unity of invention" if they are linked by a single general inventive concept. M.P.E.P. §1893.03 further provides that claims are considered to be linked by a single general inventive concept where there is a technical relationship among the claims that involves at least one common or corresponding special technical feature. M.P.E.P. §1893.03 defines "special technical features" as those technical features that define the contribution which each claimed invention, considered as a whole, makes over the prior art.

Claims 27 and 28 of elected Group II are drawn, respectively, to methods for identifying or designing a compound capable of binding to a portion of HIV-gp120 comprising (1) determining a binding site on the HIV-gp120 portion based on atomic coordinates computed from X-ray diffraction data of a crystal comprising the HIV-gp120 portion and (2) determining whether a compound would fit into the binding site or designing a compound to fit the binding site. It is noted that Groups II and VI share claims 27 and 28. It therefore cannot be the case that the claims of Groups II and VI lack at least one common technical feature.

Because all of the claims in Group II and VI are linked by at least one special technical feature, they have unity of invention pursuant to M.P.E.P. §1893.03.

In view of the foregoing, applicant respectfully requests that

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the Examiner reconsider and withdraw the requirement for restriction, at least with regard to Group VI.

If a telephone interview would be of assistance in advancing prosecution of the subject application, applicant's undersigned attorneys invite the Examiner to telephone them at the number provided below.

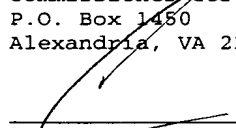
No fee, other than the enclosed fee of \$795.00 fee for a four-month extension of time, is deemed necessary in connection with this Communication. However, if any additional fee is required, authorization is hereby given to charge the amount of such fee to Deposit Account No. 03-3125.

Respectfully submitted,



John P. White  
Registration No. 28,678  
Alan J. Morrison  
Registration No. 37,399  
Attorneys for Applicant  
Cooper & Dunham LLP  
1185 Avenue of the Americas  
New York, NY 10036  
(212) 278-0400

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Alan J. Morrison  
Reg. No. 37,399

2/21/06  
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